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10/516,630	05/12/2005	Christian Kotter	4836-000012/NP	4564
27572 7550 01/06/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828			EXAMINER	
			SANDERS, JAMES M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/516.630 KOTTER ET AL. Office Action Summary Examiner Art Unit JAMES SANDERS 1791 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 18 November 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 18-22.24.25 and 27-40 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 18-22,24,25 and 27-40 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/06)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Page 2

Application/Control Number: 10/516,630

Art Unit: 1791

#### DETAILED ACTION

 In the reply filed November 18, 2008, claims 23 and 26 were cancelled, and claims 18 and 22 were amended

### Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- Claims 19-21, 25, 31-32, and 35 are rejected under 35 U.S.C. 112, second
  paragraph, as being indefinite for failing to particularly point out and distinctly claim the
  subject matter which applicant regards as the invention.
- 4. Claims 19-21, 25, 31-32, and 35 recite the limitations "said casting skin" or "the casting skin." There is insufficient antecedent basis for this limitation in the claims. It is suggested to update -casting skin- to the amended wording of -molded parts- to be consistent throughout the claims.

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 3

Application/Control Number: 10/516,630

Art Unit: 1791

6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.
- Claims 18, 20-22, 24-25, 27-28, 31-33, 36-40 can be rejected under 35
   U.S.C. 103(a) as being unpatentable over MacKay (GB 360 968 A, already of record), and further in view of Barash (US 3,542,910).

For claim 18, MacKay teaches a method for the preparation of material having a leather-like surface, comprising the steps of: applying a pulp comprising leather fibers, suspending agents, binders and optionally additives, to the porous surface of a vacuum tool; applying a vacuum in the vacuum tool to deposit pulp to a desired layer thickness along the porous surface; and transferring the material to a press tool and applying pressure to remove moisture and densify it (page 1, lines 19-92). Mackay does not explicitly teach a vacuum tool having the geometry of a three-dimensional molded part. However, the vacuum tool "screen" disclosed by MacKay is capable of being arranged into a three-dimensional geometry, and a mere change in shape would have been within the level of ordinary skill in the art. Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include this well-known option which is well within his or her technical grasp, for the benefit of forming an object of three-dimensional structure. Also, it would have been obvious to one of ordinary skill

Art Unit: 1791

in the art at the time the invention was made, when changing shape to a threedimensional geometry, to take care in applying the pulp uniformly around the threedimensional screen since MacKay teaches spreading it in a thin layer (page 1, lines 24-28).

MacKay does not teach pulp containing leather fibers in an amount of from 0.1 to 10% by weight and of a length of from 0.1 to 15mm.

However, Barash, in the same field of endeavor of reconstituted leather manufacture, teaches that a pulp is employed which contains leather fibers of a length of from 0.1 to 15 mm (Column 2, Line 46, note 15 mm = 0.6 in).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify MacKay in view of Barash, to employ pulp which contains leather fibers of a length of from 0.1 to 15 mm, since the methods lend themselves to optimization, and since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to perform routine experimentation for the purpose of optimizing process parameters. Please see In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 for further details.

Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use pulp containing leather fibers in an amount of from 0.1 to 10% by weight, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to perform routine

Art Unit: 1791

experimentation for the purpose of optimizing process parameters. Please see In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 for further details.

For claims 20-21, 25 and 33, Barash teaches that said casting skin is dried and that the drying step comprises the polymerization, polycondensation, cross-linking and/or film forming of the binder (Column 4, Lines 71-75 and Column 5, Lines 1-20) and said casting skin is provided with a surface finish and that the surface properties of the casting skin can be modified by embossing, grinding, plasma treatment, corona treatment, sand blasting or shot blasting (Column 5, Lines 26-33).

For claim 22, MacKay teaches that the porous surface of said vacuum tool is formed from a material selected from the group consisting of a sintered powder metal, a ceramic, a metal foam, and a plastic foam or screen (page 1, lines 82-83, i.e. leave a deposit on the screen).

For claim 24, MacKay does not teach that said pulp contains leather fibers in an amount of from 0.5 to 2% by weight.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use pulp containing leather fibers in an amount of from 0.5 to 2% by weight, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to perform routine experimentation for the purpose of optimizing process parameters. Please see In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 for further details.

Art Unit: 1791

For claims 27 and 31-32, Barash teaches that a pulp is employed which contains leather fibers of a length of from 0.1 to 15 mm (Column 2, Line 46, note 15 mm = 0.6 in) and that the casting skin has an average dry layer thickness of from 0.1 to 6 mm and that the casting skin has an average dry layer thickness of from 0.1 to 2 mm (Column 5, Lines 23-24, note 6 mm = 0.24 in and 2 mm = 0.08 in). Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ pulp which contains leather fibers of a length of from 0.3 to 3 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to perform routine experimentation for the purpose of optimizing process parameters. Please see In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 for further details.

For claim 28, MacKay teaches that said binder is selected from the group consisting of natural rubber, polyurethane, polyacrylates, dispersions of acrylic esters, vinyl esters and isobutylene polymers and mixed polymers, or a vinyl acetate (page 2, lines 60-61, i.e. India-rubber latex).

For claims 36 and 37, MacKay teaches that a pulp is employed which further contains non-collagenous fibers and that said non-collagenous fibers are selected from the group consisting of cellulose, cotton and/or plastic fibers (page 2, lines 25-30, i.e. beaten vegetable fibers such as cotton, hemp, etc.).

For claims 38-40, Barash teaches a part having a leather-like surface, comprising furniture, clothing, accessories, installation parts, veneers and trims and that said trim

Art Unit: 1791

are selected from the group consisting of floor trims, pillar trims, trunk trims, door trims, dashboard trims, switches, gearshift levers, seat cushions, seat rests, doorknobs and steering wheel covers (Column 5, Lines 47-49, i.e. can be used in place of high grade natural leathers in such applications as shoes, clothing, upholstery...).

- 9. Note that "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).
- Claims 19 and 29-30 are is rejected under 35 U.S.C. 103(a) as being unpatentable over MacKay, further in view of Barash, and further in view of Dimiter (US Patent 4,287,252).

For claim 19, the previous combination does not teach that said casting skin is profiled. However, Dimiter, in the same field of endeavor of reconstituted leather manufacture, teaches an improved casting skin that is profiled (Column 3, Lines 17-19, i.e. the web...is buffed on both sides to expose the natural leather particles).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of MacKay/Barash with the teachings of Dimiter to obtain the benefit of a profiled skin.

For claims 29-30, Dimiter teaches that said binder is present in an amount of from 10 to 50% by weight, based on the dry weight and that said binder is present in an amount of

forming undercuts is employed.

Art Unit: 1791

from 15 to 30% by weight, based on the dry weight (Column 2, Line 21, i.e. 15% to 25% binder).

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacKay, further in view of Barash, and further in view of Sato et al (US Patent 4,919,189).

The MacKay/Barash combination does not teach that a mold with mobile slides for

However, Sato et al, in a method of casting involving a slidable die to form an undercut, teach the concept of employing a mold with mobile slides for the benefit of forming undercuts (Column 1, Lines 56-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of MacKay/Barash with the teachings of Sato et al for the benefit of being able to form undercuts.

 Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacKay, further in view of Barash, and further in view of Purser (US Patent 5,232,643).

The MacKay/Barash combination does not teach that the casting skin is released from the surface of the vacuum tool and provided with a foam backing or injection-molded backing.

However, in the same field of endeavor of reconstituted leather manufacture, Purser teaches providing a casting skin with a foam backing or injection-molded backing (Column 3, Lines 1-24, i.e. foam adheres directly to the rear face of cloth covering).

Page 9

Application/Control Number: 10/516,630

Art Unit: 1791

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of MacKay/Barash with the teachings of Purser for the benefit of being able to provide a foam backing.

## Response to Arguments

Applicant's arguments filed November 18, 2008 were fully considered and are not persuasive.

First, applicant asserts that if the screen of MacKay had a three-dimensional geometry. one would certainly not expect an even distribution of the solid contents of the pulp applied thereto when the slurry is "flowed" over it and therefore a skilled artisan after studying the disclosure of MacKay would not modify MacKay's method so as to use a three-dimensional screen. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made, when changing shape to a threedimensional geometry, to take care in applying the pulp uniformly around the threedimensional screen since MacKay teaches spreading it in a thin layer (page 1, lines 24-28). Furthermore "even distribution" is a broad limitation not explicitly claimed and the Examiner would consider the distribution taught to be even as broadly claimed. Second, applicant asserts that MacKay fails to teach or disclose the specific leather fiber content of the pulp as now claimed under amended claim 18. Applicant submits that these leather fibers work well under the specific method taught by amended claim 18. As previously pointed out in the FAOM, Barash, in the same field of endeavor of reconstituted leather manufacture, teaches that a pulp is employed which

Art Unit: 1791

contains leather fibers of a length of from 0.1 to 15 mm (Column 2, Line 46, note 15 mm = 0.6 in).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify MacKay in view of Barash, to employ pulp which contains leather fibers of a length of from 0.1 to 15 mm, since the methods lend themselves to optimization, and since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to perform routine experimentation for the purpose of optimizing process parameters. Please see In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 for further details.

Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use pulp containing leather fibers in an amount of from 0.1 to 10% by weight, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to perform routine experimentation for the purpose of optimizing process parameters. Please see In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 for further details.

Third, applicant asserts that the remaining claims are now allowable since they depend from amended claim 18. However, since amended claim 18 is still not allowable, the previous grounds of rejection regarding the remaining claims (necessarily modified per amended claims) still hold.

Art Unit: 1791

#### Conclusion

 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES SANDERS whose telephone number is 571-270-7007. The examiner can normally be reached on Monday through Friday, 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on 571-272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/516,630 Page 12

Art Unit: 1791

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JMS

/Joseph S. Del Sole/ Supervisory Patent Examiner, Art Unit 1791